

VISIONIK®

COM2 communication cards

BPS1.C2/...

For process unit BPS1..

Cards with terminal block for process unit BPS1... to communicate as a VISIONIK building process station (BPS) starting from version 20.

Two COM2 types with the following connections:

- **BPS1.C2/1F** To connect FLN-devices such as terminal equipment controllers (TEC) and AEROGYR ventilation controllers (RWI) to the floor level network
- **BPS1.C2/2M** To connect Monogyr controllers and switching units to the Monogyr bus

Use

COM2 communication cards are used to:

- Integrate individual room control systems into the VISIONIK BPS
- Integrate individual room control systems via VISIONIK BPS and building level network into a master control system.

Functions

COM2 communication cards in the VISIONIK BPS facilitate data exchange with the connected individual room controllers via the respective bus (floor level network or Monogyr bus).

Type summary

Communication card for floor level network BPS1.C2/1F
Terminal block PVX1.2PM
Communication card for Monogyr bus **BPS1.C2/2M**
Terminal block **PVX1.2PM**

Equipment combination

Process unit, system neutral **BPS1...** Data sheet 8414
Program card **BPS1.M/E2** Data sheet 8318

Technical design

Depending on the type, COM2 communication cards provide the following functional units:

- interface adapter to the Floor Level Network
or
- interface adapter to the Monogyr bus

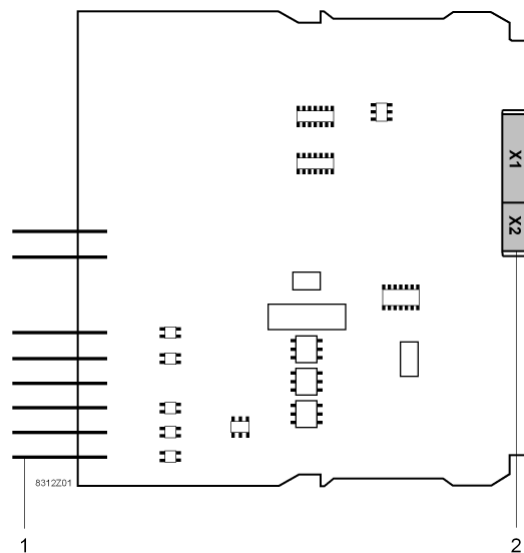
The EEPROM serves to store canned data and configuration data.

Interface specifications, see "Technical data".

Mechanical design

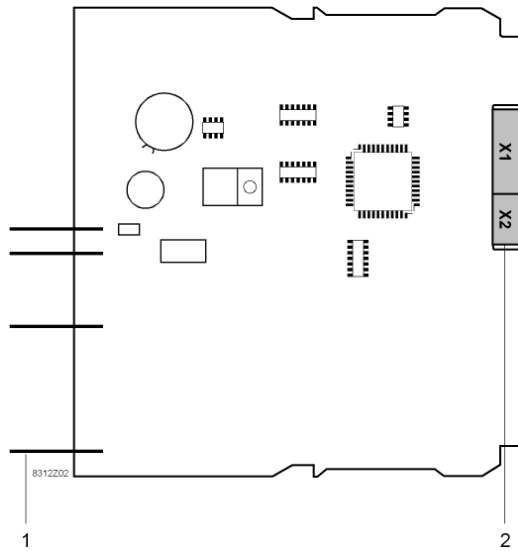
Plug-in circuit boards, with Faston tabs to the terminal block on the connection side. The associated terminal block is mechanically encoded allowing to connect the block only in the correct location (II) on the process unit.

View of the
BPS1.C2/1F card



- 1 Plug contacts to the terminal connection block on the process unit
- 2 Internal plug connection to the process unit

View of the
BPS1.C2/2M card



- 1 Plug contacts to the terminal connection block on the process unit
- 2 Internal plug connection to the process unit

Engineering notes



Observe the following during engineering:

- Use the cards only for applications as described in the brief description on the title page (bold print) and in section "Use".
- The specifications in section "Technical data" apply to all connections.
- Wire the cards in accordance with section "Internal diagrams".
- The section "Technical data" in data sheet 8301 (VISONIK Building Process Station, overview) applies to the bus connections in an overall system.

Mounting notes



The communication cards come with a set of instructions illustrating how and where the cards must be installed.

Do not touch any electrical contacts or components on the open unit. Electrostatic discharges may destroy sensitive components!

When mounting the cards, apply appropriate protective measures as, for example, using an earthed ESD-antistatic mat with wrist connection.

Commissioning notes

Requirements In order to commission and test communications, a program card must be plugged into the VISONIK BPS.

Technical data

General data

CE-conformity:

Electromagnetic compatibility	89/336/EEC
Emissions	EN 50 081-1
Immunity	EN 50 082-2

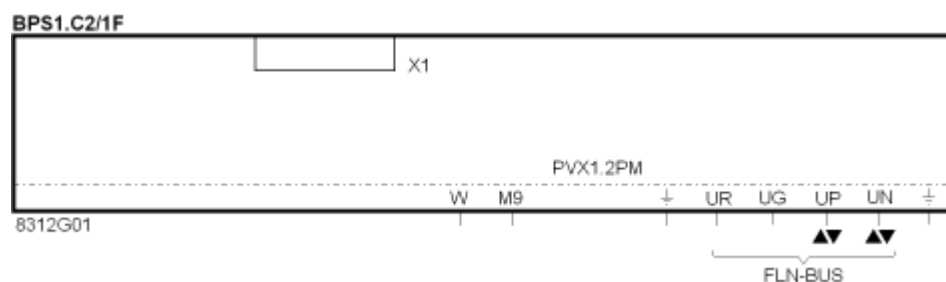
Weight with terminal block, no packaging materials 0.25 kg

Note Ambient conditions and other general data of process unit PRV2 equally apply to the cards. Refer to "Technical data" in data sheet 8411.

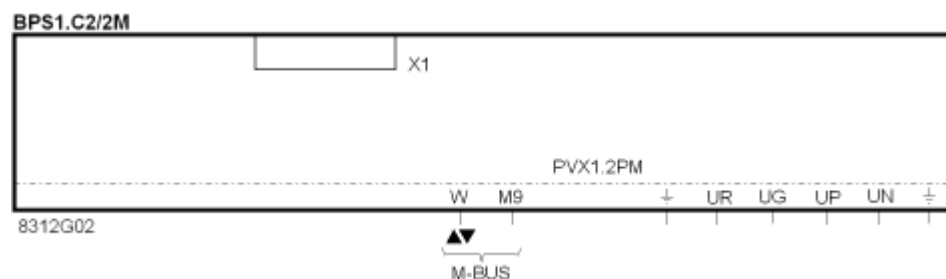
Floor level network card BPS1.C2/1F	Physical layer	fully compatible with Profibus
	Transmission speed	19200 bps (fixed)
	Transmission level to	RS485
	Round cable connection	to terminal block II, PVX1.2PM
	Round cable 2-pin, polarity dependent	screened
	length of a bus segment	max. 1200 m incl. spur lines
	length of all spur lines	max. 500 m
	length of one spur line	max. 250 m
	Multiple bus length	max. 3 repeaters in series
	Total length between 2 FLN-devices	max. 4800m (4 bus segments)
Network topology	see data sheet 8026	
Monogyr bus card BPS1.C2/2M	Transmission speed	1024 bps (fixed)
	Round cable connection	to terminal block II, PVX1.2PM
	Round cable 2-pin	unscreened
	line length with 1.5 mm ²	max. 1500 m
	line length with 1.0 mm ²	max. 1000 m
Topology: line, star, tree configurations	see data sheet 8277	

Internal diagrams

FLN bus card



Monogyr bus card



Floor Level Network (FLN-bus)	Terminal	Signal
	UR	Remote supply line for bus amplifier (repeater)
	UG	Signal ground
	UP	Data line positive
	UN	Data line negative
	⊥	Connection for cable screening

Monogyr-bus (M-bus)	Terminal	Signal
	W	Bus signal
	M9	Bus neutral

Connectors

X1 Internal plug connection to process unit